Terms for PLNT 1150

Active ingredient:
that part of a chemical compound directly responsible for the control of the specified pest.

Acute toxicity:
single or short-term exposure; used to describe brief exposures and effects which appear promptly after exposure.

Adjuvant:
any materials such as wetting agents, spreading agents, stickers, penetrants, emulsifiers, etc. that are added to pesticide or spray mixtures that will enhance its performance.

Antagonism:
the phenomenon which results in a depression of compound activity when two or more chemicals are in close proximity or mixed together.

Antidote:
a practical, immediate treatment that is medicinal or may include first aid in poisoning cases.

Apoplast:
(apo means separate or detached) is made up of the total non-living cell-wall continuum of the plant. The xylem is the major component of the apoplast. Xylem translocation is via the apoplast.

Aquifer:
Geologic formation of permeable rock, sand, or gravel.

Brand name or trade name:
the name, number, trade-mark or designation applied to an economic poison of any particular description by the manufacturer, distributor, importer or render.

Biological control:
a natural means of pest control by enemies that occur in the area or may be introduced such as predators or plant disease.

Carcinogen:
any substance capable of producing cancer or a chemical which causes or induces cancer.

Carrier:
material added to an active ingredient to facilitate its preparation, storage, shipment, or use.

Chemical name:
scientific name of the active ingredient found in the formulated product. The name is derived from the chemical structure of the active ingredient.

Chlorosis:
the yellowing of normal green plant tissue.

Cholinesterase:
an enzyme of the body necessary for proper nerve function that is inhibited or damaged by organophosphate or carbamate insecticides taken into the body by any route.

Chronic toxicity:
occurring over a long period of time, either continuously or intermittently, used to describe ongoing exposures and effects that develop only after a long exposure.

Common name:
a common chemical name given to a pesticide by a recognized committee on pesticide nomenclature. Many pesticides are known by a number of trade or brand names but have only one recognized common name.

Compatible:
refers to chemical compounds that can be mixed together without detrimentally affecting the performance of either.

Contact pesticide:
kills plant tissue or causes an insect's death when it touches external parts.

Defoliant:
a compound used to cause leaves or foliage to drop from the plant.

Degradation:
process of decomposing or breaking down of a pesticide into a less active compound or element.

Desiccant:
a pesticide used as a harvest aid to dry up plant leaves and forage.

Drift:
the movement of air-borne pesticide particles by air motion or wind away from the intended target area.

Emulsifier:
a material added to a pesticide formulation to facilitate its suspension in a liquid.

EPA:
United States Environmental Protection Agency.

Formulation:
a mixture containing the active pesticide, the carrier, diluents and other additives required to make the material ready for application.

General use pesticide:
if a pesticide will harm the applicator or the environment very little or not at all when used as directed, it will be labeled a general use pesticide.

Inert ingredient:
that part of a compound without toxic or killing properties sometimes called the carrier.

Integrated pest management:
multiple approaches to pest control (resistant varieties, mechanical, natural enemies) giving consideration to minimum pesticide use.

Label:
all written, printed or graphic matter on or attached to pesticide containers as required by law.

LD_{50}:
the amount of a chemical that is lethal to one-half (50%) of the experimental animals exposed to it. LD_{50}s are usually expressed as the weight of the chemical per unit of body weight (mg/kg). It may be fed (oral LD_{50}), applied to the skin (dermal LD_{50}), or administered in the form of vapors (inhalation LD_{50}).

Low volume spray:
spray application of 5 to 20 gallons per acre.

mg/kg:
milligrams per kilogram. Same as parts per million.

Mutagenic:
capable of producing genetic changes or damage in a cell.

Oncogen:
a substance capable of producing benign or malignant tumors.

Pesticide:
any substance or mixture of substances used to control pests such as insects (insecticides), rodents (rodenticides), weeds (herbicides), fungi (fungicides), or any other pests.

Pesticide tolerance:
amount of pesticide residue which may legally remain in or on agricultural produce at the time of sale.

Phytotoxic:
poisonous or injurious to plants.

Postemergent:
pesticide application after the crop or pest has emerged.

Preemergent:
pesticide application before the crop or pest has emerged.

Preplant:
pesticide application before the crop is planted.

Reentry interval:
the period of time designated by Federal law between the application of certain hazardous pesticides and entry of workers into a field without protective clothing or equipment.

Residue:
the amount of pesticide that remain on or in the crop or animal at the time an analysis is made.

Restricted use pesticide:
a designation given to a pesticide by the EPA which restricts purchase and use of that pesticide to certified applicators. The designation is given to pesticide which pose a potential hazard to applicators, the general public or to the environment or may be highly toxic.

Selectivity:
a characteristic of some pesticides, whereby certain undesirable species are killed while others such as crop plants or beneficial insects are not.

Surfactant:
a material used to improve the emulsifying, dispersing, spreading, wetting and other surface modifying properties of pesticide formulations.

Suspension:
a liquid in which very fine solid material is suspended, but not dissolved.

Symplast:
(sym means together) comprises the sum total of living protoplasm of a plant. It is continuous throughout the plant. The phloem is a major component of the symplast. Phloem translocation is via the symplast.

Synergism:
compounds working together to produce an effect greater than the sum of their individual actions.

Systemic:
any compound that, when absorbed into one part of an organism, becomes distributed or translocated throughout the organism.

Teratogenesis:
structural abnormalities of prenatal origin, present at birth or manifested shortly after (birth defects).

Toxicity:
(1) The capacity or property of a substance to cause adverse effects. (2) The specific quantity of a substance which may be expected, under specific conditions, to do damage to a specific living organism.

Translocation:
transfer of food or other material such as herbicides from one plant part to another.

ULV (ultra low volume):
application of a pesticide in a relatively pure form without any or very little dilution. Total volume rates are usually less than 1/2 gallon/acre.

Volatile:
a pesticide is said to be volatile when it evaporates or is vaporized (changes from a liquid or solid to a gas) at ordinary temperatures on exposure to air.

Waiting period:
the time interval between application and harvest which will insure conformance with residue tolerances.

Wetting agent:
a chemical which causes a liquid to contact surfaces more thoroughly.